

REMARKS

Claims 1-4 are pending, and all have been rejected. Claims 1, 3 and 4 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. Patent No. 6,628,974 ("Lim") in view of U.S. Patent 5,723,959 ("Iwata et al."). Claim 2 is rejected under 35 U.S.C. 103(a) as being obvious over Lim and Iwata et al., and further in view of U.S. Patent No. 6,438,392 ("Toba").

With reference to the rejection of Claims 1, 3 and 4, Applicants respectfully submit that Lim and Iwata do not provide any motivation for their combination. Besides pertaining to completely different fields, Iwata discloses a driving control system that senses whether an object is in the path of a window to prevent closure on a foreign object (see Col. 2, ln. 30-35), mainly for safety concerns. The present invention is aimed at providing a control system for opening and closing a folding mobile terminal, for convenience.

The Examiner states that Iwata teaches a mechanism that controls operation of an object, and this mechanism would be applicable to the sub-body of a foldable cellular phone. This characterization is extremely broad; a mechanism that controls operation of an object is every mechanism; that is what mechanisms do. To view Iwata in this way would allow combination of references from any and all fields. *Particular* reasons that a skilled artisan would combine the components must be shown. *In re Kotzab*, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000).

In this case, that means finding a particular reason a skilled artisan would combine a driving mechanism for a power window in an automobile, with a driving mechanism for a cellular phone. On its face, the combination is a mismatch. The components and circuitry in a cellular phone are drastically different from those in a car door. And further, it is readily apparent that the components used in a car door would not be applicable nor function as needed in a mobile terminal. It follows that no one would be motivated to combine technology from the two divergent fields.

In addition, the motivation behind Iwata and the instant application differ as well. Iwata

is motivated by safety concerns; the present invention, by convenience. It can even be said that the two are at odds; what is safe is often not convenient and what is convenient is often not safe. Again, there is no motivation or reason to combine a power-window-safety-drive mechanism with a powered sub-body for a mobile terminal.

Without the requisite motivation to combine Lim with Iwata, the Examiner has not shown all the limitations of Claims 1, 3 and 4 in the prior art. Lim alone is insufficient as it lacks a current sensing unit as recited in Claim 1 and does not teach or suggest measuring motor driving current and discontinuing to drive the sub-body drive motor as recited in Claim 3.

Even if there was a motivation to combine the references, they still do not teach all the limitations of the claims. Lim does not consider the case that inevitable obstacles interrupt a driving motor. Iwata merely discloses detecting the current flowing to a motor and cutting the power. Both references, alone, or in combination, fail to consider the step of automatically cutting a motor off after repeatedly driving the motor several times when the measured amount of motor driving current is greater than a predetermined current threshold value and when a sensor means senses neither a fully opened status or a fully closed status of the sub-body, as recited in amended Claims 1 and 3.

The present invention discloses at least two technical features not present in the cited prior art. The first is the step of discontinuing to drive a motor when the measured amount of motor driving current is greater than a predetermined current threshold value *and* a sensor means senses either a fully open or closed status of the sub-body.

The second feature not shown in the cited references is the step of discontinuing to drive the sub-body drive motor, after repeatedly driving the motor several times, when the measured amount of motor driving current is greater than the predetermined current threshold value *and* a sensor means senses neither a fully open or closed status of the sub-body. Therefore, the present invention controls the motor driving current while considering the amount of motor driving current *and* the opening and closing of a folder (see p. 10, line. 26 – p. 11, line 4 of the Specification).

Applicants, therefore, respectfully submit that Claims 1, 3 and 4 are allowable over the cited references, alone or in combination. Applicants further respectfully request that the rejection of Claims 1, 3 and 4 be withdrawn.

With respect to the rejection of Claim 2, this claim depends from Claim 1, which is patentable for at least the reasons stated above. Claim 2, therefore, should be allowable as well and its rejection withdrawn since Toba does not cure the deficiencies of Lim and Iwata.

Should the Examiner believe that a telephone conference or personal interview would facilitate resolution of any remaining matters, the Examiner is requested to contact Applicants' attorney at the number given below.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Paul J. Farrell", written over a horizontal line.

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